CLAIMS

WHAT IS CLAIMED IS:

5 1. A resource manager operable to control allocation of a resource to competing computing processes, the resource manager being responsive to identification of a thread for a first process requesting allocation of the resource, when the resource is already allocated to a thread for a second process, to establish a joining function to the thread for the second process, the joining function being operable to notify the resource manager

10 on termination of the thread for the second process, and the resource manager being operable in response to termination of the thread for the second process to allocate the resource to the first process.

2. The resource manager of claim 1, wherein the resource manager comprises

15 object oriented computer software operable in an object oriented environment.

3. The resource manager of claim 2, wherein the processes are software applications operable in the object oriented environment.

20 4. The resource manager of claim 3, wherein the software applications comprise one or more bean objects registrable with the resource manager.

5. The resource manager of claim 1, wherein the resource manager comprises one or more object of the Java language.

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6. The resource manager of claim 1, comprising an object for acquiring a device.

7. The resource manager of claim 1, where the join function is a join of the type provided in a Java language environment, wherein a language event passively releases a

30 resource on termination of a thread identified by the join function.

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8.   The resource manager of claim 1 operable to control access by a plurality of telecommunications applications to a telephony device in a telecommunications apparatus.

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9.   The resource manager of claim 8, comprising a dispatch mechanism for controlling dispatching a call received by the telephony device to the telecommunications applications.

10   10.   A resource manager operable to control allocation of a resource to competing computing processes, the resource manager comprising means responsive to identification of a thread for a first process requesting allocation of the resource, when the resource is already allocated to a thread for a second process, to establish a joining function to the thread for the second process and means responsive to the joining

15   function notifying the resource manager on termination of the thread for the second process to allocate the resource to the first process.

11.   A computer software resource manager on a data carrier, the resource manager being operable to control allocation of a resource to competing computing processes, the

20   resource manager being responsive to identification of a thread for a first process requesting allocation of the resource, when the resource is already allocated to a thread for a second process, to establish a joining function to the thread for the second process, the joining function being operable to notify the resource manager on termination of the thread for the second process, and the resource manager being operable in response to

25   termination of the thread for the second process to allocate the resource to the first process.

12.   Telecommunications apparatus comprising at least one telephony resource for connection to a telecommunications network and a resource manager for controlling

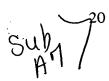30   allocation of the telephony resource to competing computing processes, the resource

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manager being responsive to identification of a thread for a first process requesting allocation of the resource, when the resource is already allocated to a thread for a second process, to establish a joining function to the thread for the second process, the joining function being operable to notify the resource manager on termination of the thread for

5   the second process, and the resource manager being operable in response to termination of the thread for the second process to allocate the resource to the first process.

13.   The telecommunications apparatus of claim 12, wherein the telephony resource is an interface to the telecommunications network.

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14.   The telecommunications apparatus of claim 12, wherein the telephony resource is a modem.

15.   The telecommunications apparatus of claim 12, wherein the computing

15 processes comprise call processing applications.

16.   The telecommunications apparatus of claim 15, wherein the call processing applications comprise at least one application selected from:

a call answering application;

a voicemail application;

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a facsimile application; and

a data application.

17.   A computer-implemented method of managing allocation of a resource to

25 competing processes, the method including:

responding to identification of a thread for a first process requesting allocation of the resource, when the resource is already allocated to a thread for a second process, to establish a joining function to the thread for the second process;

responding to the joining function notifying termination of the thread for the

30 second process to allocate the resource to the first process.

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18.   The method of claim 17, wherein the join function is a join function of the type provided in a Java language environment, whereby a language event passively releases a resource on termination of a thread identified by the join function.

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19.   The method of claim 17, for controlling access by a plurality of telecommunications applications to a telephony device in a telecommunications apparatus.

10   20.   The method of claim 19, wherein the telephony device provides an interface to a telecommunications network.

21.   The method of claim 20, wherein the telephony device is a modem.